### 4.13 CULTURAL RESOURCES

This section identifies potential impacts on the cultural resources, archaeological and historic, within Ames Research Center from each of the five alternatives, and proposes mitigation measures to reduce or eliminate identified impacts.

# A. Standards of Significance

An alternative for the NASA Ames Development Plan (NADP) would have a significant impact with regard to the cultural resources at Ames Research Center if it would:

- Affect known or potential archaeological resources through ground disturbance
- Damage, destroy, or significantly affect the integrity of any of the contributing elements on or eligible for the National Register of Historic Places.

## B. Impact Discussion

As described in Chapter 3 of this EIS, although ten prehistoric and historic archaeological sites were discovered and formally recorded on or near the current site of Ames Research Center early in this century, it is no longer possible to find evidence of any of the sites that lay within the Center itself. They appear to have been seriously disturbed or destroyed by agriculture, fill, and development over the course of the century. It is possible, however, that one of these lost sites could be rediscovered during construction or demolition activities associated with implementation of the NADP, or that previously unknown remains could be uncovered.

<sup>&</sup>lt;sup>1</sup> Basin Research Associates. Archaeological Overview and Survey. 1991

<sup>&</sup>lt;sup>2</sup> SAIC. NASA Ames Research Center Preliminary Draft Historic Resources Protection Plan. September 1999.

The Shenandoah Plaza Historic District is the primary group of historic resources within Ames Research Center, as described in Chapter 3 of this EIS. The buildings, landscapes, and objects included in the Shenandoah Plaza Historic District are eligible for listing on the National Register of Historic Places (NRHP) because of their association with lighter-than-air technology during the inter-war period between 1932 and 1945, and because of their distinctive site plan and Spanish Colonial Revival architecture. The Unitary Plan Wind Tunnel is on the NRHP. Building N-200, the 40- by 80-Foot Wind Tunnel (N221) and the 6- by 6-foot Supersonic Wind Tunnel (N-226) are being nominated for the NRHP because of their associations with the development of American aeronautics and space flight.

#### 1. Shenandoah Plaza Historic District

To comply with historic preservation requirements set forth in Section 106 and 110 of the National Historic Preservation Act of 1966, NASA has prepared an Historic Resources Protection Plan (HRPP) for the Shenandoah Plaza Historic District. Among the objectives of the HRPP is to provide for the protection and treatment of historic properties by establishing guidelines for new construction within the Shenandoah Plaza Historic District, and for the repair, maintenance, rehabilitation, alteration, reuse and leasing of historic resources within the District. The HRPP is published as Appendix G of this EIS.

The HRPP sets out nine preservation management goals and policies for the Shenandoah Plaza Historic District. The HRPP also categorizes all properties within the District following a system of National Register Treatment Categories based on those developed by various branches of the Department of Defense. National Registry eligibility has been determined for all Shenandoah Plaza buildings, yet within this group there is flexibility for determining treatment categories. Each of the four treatment categories proposes a particular level of preservation treatment suitable for the significance of the resources within it. The HRPP states that all undertakings that may affect the Historic District shall implement treatments as outlined in the Plan.

The HRPP outlines stipulations for lease agreements and special event licenses for all contributing and non-contributing buildings within the Shenandoah Plaza Historic District. Procedures for the unexpected discovery of cultural resources are also outlined to ensure that all unidentified buried archaeological resources are properly identified, evaluated and treated (if necessary). Furthermore, the HRPP provides design guidelines for new construction within the Shenandoah Plaza Historic District to avoid incompatible uses, inappropriate locations of new buildings, and visually incompatible designs. The design of any new construction must be coordinated with the State Office of Historic Preservation. Architectural guidelines for the repair, maintenance, rehabilitation, alteration, and reuse of contributing buildings within the District have been prepared by NASA and have been integrated into the HRPP as an addendum.

Under the HRPP, the Shenandoah Plaza Historic District would be treated as follows:

- Under Alternative 1, all historic buildings within Ames Research Center would be preserved. No infill development would be constructed within the Historic Districts, so there would be no impact on their visual integrity.
- Under Alternatives 2 through 5, no historic buildings within Ames Research Center would be demolished. Almost all of the non-historic infill buildings within the Historic District would be removed, and a strip of land running parallel to Hangar 1 would be restored to open space as in the original site plan for Moffett Field. This would substantially improve the integrity and coherence of the Shenandoah Plaza Historic District. A limited number of infill buildings would be constructed within the Shenandoah Plaza Historic District, which could have an impact on its visual integrity if they were not designed carefully to ensure their compatibility with historic architecture.
- Under Alternatives 2 through 5, many of the historic buildings within the Shenandoah Plaza Historic District would be rehabilitated to make them

suitable for reuse. These actions could disturb the integrity of the original buildings, creating significant impacts on the historical integrity of the contributing buildings.

# 2. Historic Buildings within the Ames Campus

Under all of the proposed alternatives, there would be no impacts on any of the buildings listed or eligible for listing on the National Register of Historic Places within the Ames Campus.

## 3. Cumulative Impacts

The NADP would be implemented to avoid impacts to cultural resources. Therefore, there would not be a possibility for the NADP to combine with the cumulative projects listed in Chapter 2 to create cumulative impacts on cultural resources.

## C. Impacts and Mitigation Measures

This section summarizes significant impacts identified in Section B, and proposes mitigation measures for each identified impact.

**Impact CUL-1:** Construction activities could disturb lost or undiscovered subsurface archaeological resources on the site.

Applicable to: Alternatives 2 through 5, and Mitigated Alternative 5

Mitigation Measure CUL-1: In the event that human remains and/or cultural materials are found in the process of implementing the NADP, all project-related construction would cease within a 15 meter (50-foot) radius in order to proceed with the testing and mitigation measures required pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California. The State Historic Preservation Officer and the NASA Federal Preservation Officer would be contacted as soon as possible. Construction in the affected area

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would not resume until the regulations of the Advisory Council on Historic Preservation (36 CFR Part 800) have been satisfied.

In the event of the discovery of human remains, the Santa Clara County Coroner would be notified by the project manager. The Coroner would make the determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his or her authority, s/he would notify the Native American Heritage Commission, who would attempt to identify the descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to State law, then the remains would be reinterred with items associated with the Native American burial on the property in a location not subject to further disturbance.

**Impact CUL-2:** Rehabilitating existing historic structures could significantly impact their integrity.

Applicable to: Alternatives 2 through 5, and Mitigated Alternative 5

Mitigation Measure CUL-2a: Any project that involves the rehabilitation of contributing buildings within the Shenandoah Plaza Historic District would follow the Historic Resource Protection Plan. Appropriate landscaping would be used to avoid impact to historic buildings. The Historic Resources Protection Plan includes the guidelines for Rehabilitation of Historic structures prepared for NASA by Architectural Resources Group, and the Reuse Guideline for Hangar 1, prepared by Page and Turnbull, which comply with the Secretary of the Interior's Standards. New additions would be located on secondary facades. Restoring facades that have been previously altered would be considered as an alternative.

<u>Mitigation Measure CUL-2b</u>: The State Historical Building Code would be used when planning for structural stability or the installation of protective or code required mechanical systems or access.

<u>Mitigation Measure CUL-2c</u>: Design guidelines for the historic structures would be modified to include:

- Replacement glass would be with like kind.
- No change of exterior material would occur.
- Installation of utilities would not affect historic character defining features.
- New materials would not affect the historic integrity of original materials.
- Ground disturbing activities would match materials in-kind.

**Impact CUL-3**: Infill development within the Shenandoah Plaza Historic District could threaten the District's visual integrity.

Applicable to: Alternatives 2 through 5, and Mitigated Alternative 5

Mitigation Measure CUL-3a: Any new building or addition to an existing building constructed within the portion of the Shenandoah Plaza Historic District that lies within Ames Research Center would follow the Historic Resources Protection Plan, which includes the Design Guidelines for New Construction in the Shenandoah Plaza Historic District prepared for NASA by Architectural Resources Group (ARG). These guidelines set parameters for compatible designs including orientation, height, setback, materials and style. The guidelines also indicate which areas must not be used as building sites.

Mitigation Measure CUL-3b: Any project undertaken within the vicinity of designated or potentially-designated resources, structures or districts would be subject to review by the State Historic Preservation Officer through the Section 106 process of the National Historic Preservation Act. Any agreed upon mitigation, such as plan modification and design harmony, would be undertaken.